

It would seem, too, as if the relations of these insects to the surrounding world, the levers by means of which Derivatists suppose Natural Selection to move the World of Life, were more constant than usual in species of this genus, confined as it is (and as no other genus of Diurnal Lepidoptera is) to alpine and arctic regions, and especially if Lichens are the food-plant of all of them, as I believe is the case with *C. semidea*.

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ON SOME NEW SPECIES OF PSELAPHIDÆ.

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Entirely new forms of this interesting family of Coleoptera are daily discovered, and it seems necessary to settle the question, at least with some of them, in order not to be behind time.

By the kindness and liberal assistance of the heroes of American Entomology, Dr. John L. LeConte of Philadelphia, and Henry Ulke of Washington, D. C., I was enabled to acquaint myself with forms till lately unknown, besides those I collected in different parts of the U. S. Encouraged by so distinguished Entomologists, I undertook to describe the following forms, commencing with the only genus of Europe till now not known to be represented on this Continent.

BYTHINUS, Leach.

Antennæ distantes in fossa ante oculos insertæ 11-articulatæ.

Palpi maxillares 4-articulati, articulo primo filiformi secundo clavato, tertio globuloso, quarto magno securiformi.

Abdomen marginatum.

Thorace subglobosus, basi angustatus.

Tarsi monodactyli.

1. *B. zonatus*.—Fusco-rufus, pubescens subtilissime punctulatus, capite bivoato, fronte emarginato, thorace globoso, truncato, unifoveato, elytris convexis, abdomine brevi marginato. Long 1.2 mill. metr.

Bythino macropalpi Europæ simillima. Fusco-rufus, brevissime pubescens. Caput læve, vertice stigmatibus binis leviter impressis, fronte sulco transversali inconspicuo leviter impressa. oculis paulo prominulis. Antennæ breviusculæ, in fovea sub frontis marginæ insertæ, pubescentes, articulo primo sequenti majore, hoc iterum majore tertio, 3—9 æqualibus. rotundatis, 10^{mo} transverso obconico, ultimo maximo, inflato, ovato. Palpi maxillari minutæ. articulo primo et secundo filiformibus, tertio

globoso minuto, quarto magno fere securiformi. Thorax globosus ad basin truncatus lævis, parce pubescens, zona basali punctata et foveola basali mediana ornatus. Elytra subtilissime inconspicue punctulata, latitudine longiora, convexa, stria dorsali nulla, stria suturali integra, humeris rotundatis pendentibus. Abdomen marginatum pubescens, inconspicua punctulatum. Tibiæ posticæ arcuatæ, tarsis monodactylis.

Habitat Ludovicianam et Virginiam.

2. **B. carinatus.**—Piceus pubescens punctatus, capite carinato, foveis duabus ante oculos leviter impressis, antrorsum sulco conjunctis; fronte acuminato; thorace subgloboso, foveis subbasalibus tribus sulco conjunctis. Antennis 11-articulatis. Long 1.66 mill. metr.

Elongatus, piceus, pubescens. Caput pentagonale ad basin truneatum dense punctatum, medio carinatum, carina postice dilatata, utrinque late foveatum, foveis sulco antrorsum angulato leviter impresso connexis, fronte acuminato. Antennæ insertæ in fovea sub frontis margine, articulis duobus primis magnis, longitudine 4 sequentibus æquantibus, articulo primo cylindrico longissimo, 2^{do} incrassato globoso, 3.—5. oblongis æqualibus minoribus, 6.—8. æqualibus globosis, 9^{mo} 10^{mo} que lato gradatim iucrassatis transversis, ultimo majore ovato, articulis ultimis tribus longitudine duabus primis æqualibus. Palpi maxillares articulo primo filiformi, 2^{do} clavato tertio globoso, quarto securiformi magno. Thorax subrotundus latitudine vix longior, lateribus in medio rotundatim subangulatus, truncatus punctatus, ad basin trifoveatus, foveis sulco angulatim connexis, leviter impressis. Elytra thorace fere duplo latiora, antice angustata, convexa, punctata ad apicem truncata paulo declivia, stria dorsali ante medium desinente, stria suturali integra. Abdomen parce punctatum, pubescens, marginatum, segmento primo majore. Pedes punctati, tibiis pone medium arcuatis. Tarsi monodactyli.

Specimen unicum a Henrico Ulke in Pennsylvania detectum.

BRYAXIS, Leach.

Antennæ basi modice distantes, in fossula subfrontis margine insertæ.

Palpi maxillares 4-articulati articulo 4^{to} fusiformi.

Mentum cordatum basi angustatum.

Abdomen marginatum articulo 1^{mo} majore.

Tarsi unguiculo singulo.

3. **B. scabra.**—Niger, punctatus, antennis pedibusque rufis, capite punctato 3-foveato, thorace confluyente, forte punctato, trifoveato, elytris nitidis punctulatis, abdomine lævi pubescente. Long 1.33 mill. metr.

Statura B. propinquæ. Caput dense punctulatum, foveis duabus ante oculos instructis, fovea altera in frontis margine impressa, anten-

nis prufis 11-articulatus. Thorax scaber vel densissime punctatus ad basin foveis tribus inconspicuis, fovea mediana minori. Elytra subtilissime dense punctulata nitida, tenuissimo pube brevi provisa, stria dorsali pone medium abbreviata. Abdomen læve, parce et breviter pubescens.

Femina antennis brevioribus differt.

Habitat in Insula longa Novoboracenci.

4. **B. minuta**.—Rufa, minutissime punctulata, dense pubescens, capite inter insertionem antennarum impresso, thorace unifoveato elytris convexis, abdomine brevi. Long 1.1 mill. metr.

Caput pentagonale, convexum, fronte emarginato. Antennæ sub frontis margine laterali in fossula insertæ, articulis duobus primis oblongis majoribus 3—8 minutis æqualibus moniliformibus, 9^{no} 10^{mo} que gradatim majoribus, ultimo ovato, longitudine penultimis duobus æqualibus. Palpi maxillares articulo tertio globoso, 4^{to} fusiformi. Thorax hirtus, rotundatus, convexus, truncatus, punctulatus, in basis medio fovea minuta instructus. Elytra latitudine vix longiora, pubescens. invisibile tenuiter punctulata, stria dorsali brevissima ante partem quartam abbreviata. Abdomen densius pubescens, segmento primo majore, bistriato, striis brevissimis.

Differentia sexuum me evadit.

Habitat in Ludoviciana et Novo Eboraco.

5. **B. cavicornis**.—Elongata, rufa, thorace punctulato, foveis tribus intermedia minore; elytris subtiliter punctulatis, antennarum articulo ultimo triangulari, emarginato. Long 2 mill. metr.

Bryaxi lunigeræ simillima, antennarum antem articulis ultimis tribus essentialiter differt. Antennarum articulo primo obconico, 2.—4. precedenti gradatim minore, 5—8 subæquali, 9^{no} majore, transverse obconico, 10^{mo} præcedenti duplo longiore emarginato, fere reniformi. ultimo maximo triangulari, emarginato, non dissimili articulo ultimo palporum Tmesiphori.

Specimina masculina duo in Virginia dedecta a Clar. Henrico Ulke.

DECARTHON.

Antennæ distantes, 10-articulatæ in fossula sub frontis margine insertæ.

Palpi maxillares 4-articulatæ, articulo 4^{to} fusiformi.

Mentum basi angustatum.

Thorax unifoveatus vel lævis.

Abdomen marginatum, articulo primo majore.

Femora mediana maris plus vel minus armatæ.

Tarsi monodactyli.

Genus novum separatum a genere "Bryaxis."

6. *D. abnorme*.*Bryaxis abnormis*, Lec.

Mas femoribus intermediis supra tuberositate obsoleta provisa differt.

7. *D. longulum*.*Bryaxis longula*, Lec.

Mas femoribus intermediis supra excisis, spina brevi formantibus differt.

8. *D. formiceti*.*Bryaxis formiceti*, Lec.

Mas femoribus intermediis, supra in medio spina valida provisa differt.

9. *D. cornutum*.—Rubro testacea, elongata impunctata, pubescens, capite sculpto, thorace subgloboso, truncato, lævi, elytris paulo convexis, abdominis segmento primo carina transversa basali. Long 1.80 mill. metr.

Statura elongata Batriso similis, minus convexa. Caput quadratum angulis rotundatis, fronte sulco antrorsum semicirculari, leviter emarginato, vertice in medio tuberculo transverse oblongo, spinoso, occipite forte subito elevato, elevatione antice profunde emarginata, in cornua dua producta. Antennæ pilosæ 10-articulatæ, capitis thoracisque longitudine, articulo primo et secundo majore fere æquali, 3^{tio} minore oblongo, 4^{to} majore longitudine primo æquali, 4 sequentibus æqualibus minimis, globulosis, nono transverso majore, ultimo maximo, ovato, acuminato. Palpi minimi articulo secundo cylindrico, 3^{tio} globoso, 4^{to} ovato acuminato. Thorax subglobosus, politus, parce pubescens, impunctatus, basi sulco transverso inconspicuo. Elytra parce pubescentia, stria dorsali ante medium abbreviata. Abdomen pubescens, segmento primo ad basin carina transversa utrinque abbreviata instructo. Pedes pubescentes, monodactyli.

Femina capitis sculptura obsoleta antennis que simplicibus differt.

Habitat in Illinois et Pennsylvania. Specimen unicum masculinum in collectione mea alterum femininum in Coll. Dom Henrici Ulke.

10. *D. stigmatosum*.—Castaneum dense breviter pubescens punctatum, capite punctato, planiusculo, stigmatibus minutis quatuor semicirculariter dispositis, thorace rotundato, unifoveato, elytris convexiusculis, punctatis. Long 1.70 mill. metr.

Statura elongata, dense breviter pubescens, punctatum. Caput dense punctatum, plano-convexiusculum, fronte ad marginem anteriorem foveis minutis quatuor semicirculariter dispositis. Antennæ articulo 1—8 moniliformibus sensim deminutivis 9^{no} subgloboso majore, 10^{mo} maximo ovato. Thorax lateribus rotundatis, subtilissime punctatus. in basi medio unifoveatus. pubescens. Elytra punctata brevissime pubes-

cens, striis dorsalibus fere integris. Abdomen segmento primo utrinque juxta marginem impresso, bistriato.

Mas femoribus medianis apice anguste profundeque exciso.

Femina femoribus integris, antennarum articulis ultimis minoribus differt.

Habitat Novum Eboracum.

11. *D. exsectum*.—Piceum politum impunctatum, parce pilosum; capite bifoveato, sulcato; thorace obcordato, unifoveato, elytris rubropiceis, abdomine polito, segmento primo bistriato. Long 1.70 mill. metr.

Statura Bryaxis subtilis, impunctatum politum. Caput trapezoideum minute trifoveatum, fovea frontali minutissima cum alteris sulco capillare obsoleto connexa. Thorax obcordatus, truncatus, politus parce pilosus ad basin fovea punctiformi. Elytra polita convexa, stria dorsali leviter impressa, ad apicem obsoleta, ad basin dilatata, humeris pendentibus. Abdomen pilosum, politum impunctatum, segmento primo tenuissime bistriato, striis fere integris. Antennæ articulo primo cylindrico, articulis sequentibus subæqualibus sensim deminutivis, articulis ultimis tribus gradatim majoribus, ultimo maximo ovali. Femora dilatata. Tibiæ paulo arcuatæ.

Mas femoribus intermediis a medio excisis, spina valida.

Femina femoribus integris.

Præcedenti similis, sculptura tamen polita, impunctata, pube longa erecta et femoribus maris a medio excisis sine difficultate distinguendus.

Habitat Novum Eboracum et Pennsylvaniam.

12. *D. strenuum*.—Convexum fuscum dense, valde pubescens, capite insculpto, thorace obcordato, fovea basali punctiformi, elytra apice emarginata. Long 1.9 mill. metr.

Caput plano convexum tenue inconspicue punctulatum dense pilosum. Antennæ capite thoraceque longiores, dense pubescentes, articulis 3—5 æqualibus, 6^{to} globuloso paulo majore septimo. 7—9^{no} gradatim majoribus, 10^{mo} maximo ovali. Thorax rotundatus unifoveatus, pilosus. Elytra stria dorsali paulo obliqua, postice obsoleta, inconspicuo punctulata. Abdomen segmento primo majore, tenuiter bistriato, impunctatum. Mas ignotus.

Speciesum adhuc detectarum maxima.

Specimen unicum detectum in Pennsylvania a Dom. LeConte.